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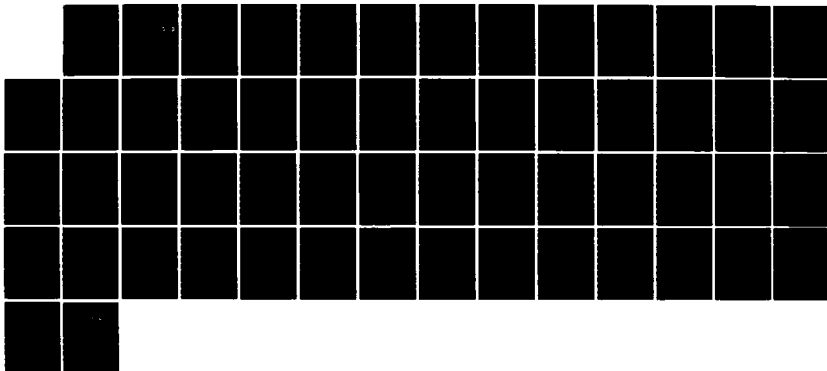
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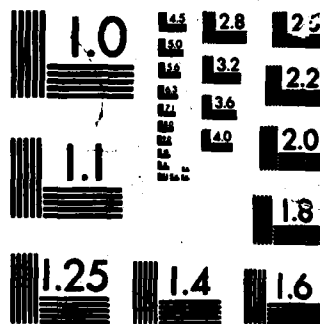
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# AIR COMMAND AND STAFF COLLEGE

## STUDENT REPORT

THE SILENT ENEMY: COMBAT STRESS  
REACTION

MAJOR ROBERT ALLEN KREAGER 86-1450

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**TITLE** THE SILENT ENEMY: COMBAT STRESS REACTION

**AUTHOR(S)** MAJOR ROBERT ALLEN KREAGER, USAF

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Submitted to the faculty in partial fulfillment of  
requirements for graduation.

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<p>→ This project is an historical analysis of combat stress reaction. It traces the evolution of the identification, treatment and prevention of combat stress throughout American wars. It also draws upon lessons learned from the Israelis, and <del>lastly</del> it assesses the (POW) combat stress reaction.</p> <p><i>(Keywords: Battle Fatigue; Stress; Psychology; Prisoners of War)</i></p> <p><i>Stress; Battle Fatigue; Psychology; Prisoners of War</i></p>					
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## PREFACE

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Emotional wounds have disabled combatants since man first stepped onto the battlefield. The blow is silently struck yet its impact may be as effective as being hit by shrapnel.

This project is an historical analysis of such emotional wounds. The study is also an assessment of the evolutionary process of treatment and prevention as illustrated through experiences gleaned from previous wars. Provision of this analysis is intended to assist mental health officers in particular and military leaders in general to better equip them to cope with this "Silent Enemy."

I wish to acknowledge the assistance provided by my advisor Major Stephen L. Havron, Air Command and Staff College, Air University, Maxwell, AFB, Alabama and to my wife Susan for her patience and support.

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## ABOUT THE AUTHOR

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Major Robert A. Kreager enlisted in the Army in July 1958. Upon completion of basic training at Fort Ord, California, he attended advanced infantry training at Fort Ord. Major Kreager was assigned to Fort Bragg, North Carolina, and completed airborne school in April 1959. He was assigned to the 503rd Infantry Brigade and completed his tour in July 1961. Upon discharge from the Army, Major Kreager began his college studies and received an Associate of Arts degree from Orange Coast College, Costa Mesa, California, a Bachelor of Arts degree in English from California State University at Fullerton, California, a High School Teaching Credential from Brigham Young University, Provo, Utah, and a Masters degree in Social Work from the University of Utah, Salt Lake City, Utah. Major Kreager was employed by the Victorian Mental Health Authority, Australia, when he was granted a direct Air Force commission via the Air Attache', American Embassy, Canberra, Australia in May 1973. His first assignment was to Myrtle Beach AFB, South Carolina, as Chief, Mental Health Clinic. In 1977 he was assigned to McChord AFB, Washington, and served as Chief, Mental Health Clinic. In 1978 he completed Squadron Officers School in residence, and in 1979 he was assigned to TUSLOG Detachment 119 Izmir, Turkey, as Chief, Mental Health Clinic. In 1981 he was assigned to Fairchild AFB, Spokane, Washington, as Chief, Psychiatric Social Worker, and in 1982 he was assigned to RAF Upper Heyford, England, as Chief Psychiatric Social Worker. His decorations include the Meritorious Service Medal, with one oak leaf cluster, the Air Force Commendation Medal, with one oak leaf cluster, and the Army Good Conduct Medal. He is married to the former Joan Susan Wright of Fullerton, California, and they have three sons: Joel, Don and Derek.



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## EXECUTIVE SUMMARY

Part of our College mission is distribution of the students' problem solving products to DoD sponsors and other interested agencies to enhance insight into contemporary, defense related issues. While the College has accepted this product as meeting academic requirements for graduation, the views and opinions expressed or implied are solely those of the author and should not be construed as carrying official sanction.

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REPORT NUMBER 86-1450

AUTHOR(S) MAJOR ROBERT A. KREAGER, USAF

TITLE THE SILENT ENEMY: COMBAT STRESS REACTION

I. Purpose: To identify the characteristics of combat stress reaction and formulate programs for prevention and treatment.

II. Problem: Combat stress has been identified in every American war and during each conflict medical and command personnel had to re-learn the principles of combat psychiatry. This delay in organizational development and the ineffective coordination of care resulted in loss of our most critical asset, manpower.

III. Data: Current literature and Israeli combat experience characterize the modern battlefield as one of high intensity, high lethality, and high mobility of combined arms which fight night and day without rest. Such a scenario will consequently produce high psychiatric casualties. These casualties will not result from weak moral fiber or inadequate personality structure, but will be a normal reaction to abnormal circumstances. Every man has a breaking point; however, if provided immediate treatment with an expectation of return to combat, these casualties will recover and stem the loss of manpower.

IV. Conclusions: Combat stress reaction is a treatable condition. Principles of identification, treatment and prevention have evolved from American battlefield experiences.

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## CONTINUED

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Application of these principles in a timely manner may decide the course of battle.

V. Recommendations: The United States Air Force and its sister services must establish military doctrine which emphasize the principles of combat psychiatry. A program should be developed which gives medical personnel realistic combat stress instruction similar to medical Red Flag exercises. Military personnel in general should be instructed in combat stress reaction as part of their professional military education. Professional military education should also focus upon Soviet combat psychiatry and psychological warfare.

## Chapter One

### INTRODUCTION

The advent of television and mass media have brought into our homes the daily news and events which give witness to our most joyous experience, or our deepest sorrow. A viewer may watch the unfolding of the Vietnam Memorial and witness the emotional surge experienced by Vietnam veterans who momentarily recall lost buddies and spent youth. Perhaps the viewer may have experienced the tremendous joy of Project Homecoming for our prisoners of war, and the brush with honor and national pride, or perhaps wonder about the 800,000 Vietnam veterans who continue to carry the emotional wounds of war. Our nation has become more aware of these wounds and an attempt has been made to provide healing; however, the nation too is healing from its guilt and its grief at not bringing home its soldiers as honorable warriors.

The research I have conducted is to address these wounds of war and to assess the effects upon our soldiers. This wound is the soldier's silent enemy and its impact is as effective as a piece of shrapnel. My task is to uncover this enemy called combat stress and to prepare the way for identification, treatment, and prevention of battlefield stress. The question that concerns me is, "Can combat effectiveness be enhanced by stress management procedures?" In order to answer this question, and to fully assess combat stress, Chapter Two will begin with a definition of stress in general and combat stress in particular. A historical review of the development and identification of combat stress as seen throughout American wars will be presented in Chapter Three. The Israeli experience in coping with combat stress is most recent and applicable to modern warfare; therefore, I will focus upon this experience in Chapter Four. As I mentioned previously, Project Homecoming brought our attention to the POW; therefore, in Chapter Five I will more closely examine individual POWs and the emotional impact of their experience. Most importantly, Chapter Six is a close look at prevention and treatment of combat stress viewed through the threat presented by the Soviet Union.

## Chapter Two

### DEFINITIONS

Stress is a frequent topic of discussion throughout our society. Stress management courses are taught at local community colleges, and newspaper articles often discuss our "age of stress." Everyone seems to have something to say, yet perceptions and experiences vary, and definitions equally vary. Therefore, prior to my analysis of combat stress reaction, I will define stress as experienced by the general population and by the military, and lastly, I will identify the characteristics of combat stress reaction. Dr. Hans Selye defines stress as,

The nonspecific result of any demand upon the body, be the effect mental or somatic. One of the first things to bear in mind about stress is that a variety of dissimilar situations--emotional arousal, effort, fatigue, pain, fear, concentration, humiliation, loss of blood, and even great and unexpected success--are capable of producing stress; hence, no single factor can, in itself, be pinpointed as the cause of the reaction as such. (9:7)

Dr. Lazarus suggests that "Stress occurs where there are demands on the person which tax or exceed his adjustive resources." (9:39) Stress is most often defined by the individual as a disturbing situation and he is unable to call upon skill to reduce or alleviate the disturbance. The two key factors present to produce stress are a subjective view of a situation, and an inability to cope with the situation. However, more recent research indicates that a situation is stressful if perceived to be by the individual. Several persons may perceive the same situation differently or may have learned to adapt to the circumstance. This was demonstrated by studies of the relationship between adrenal secretion of 17-hydrosteroid (17-OHCS) and the person's learned responses to stressful circumstances. A mean level of adrenal secretion was taken over weeks or months to demonstrate adaptability to severe stress. Such a procedure was conducted in Vietnam and will be discussed in Chapter Three.

Definitions of combat stress vary in the military community and particularly in combat as the soldier lives in constant fear of being killed, maimed, or mutilated, and he is bombarded by the sights and sounds of modern warfare. The soldier may experience the psychic stress of witnessing the death or dismemberment of friends, yet the civilian may experience similar reactions when caught in the traumatic circumstances of an earthquake, flood, or the physical and mental trauma of rape, or the loss of loved ones. Dr. Richard B. Cornfield offers the following definition,

The traumatic neuroses of war are clinical stress arising from a sudden or prolonged threat to personal survival. An overwhelming external event or series of stresses can flood the individual beyond his tolerance for integrating the experience, especially if he is unprepared for the trauma. (13:221)

Dr. John A. McKinnon divides combat stress into two categories: "war neurosis," and "post-traumatic stress disorder." (13:125) The first category was researched by Freud and his colleagues, and the major symptoms were gross motor paralysis, ~~tremor~~, and disturbed movement. Such behavior resulted from the soldier's repressions of the traumatic experiences. The second category, post-traumatic stress disorder, has been prominent since World War II and tends to be more general and often described as "battle fatigue," or "combat exhaustion." McKinnon describes the symptoms as often being disturbances of sleep and dreaming, disturbed mood and arousal responses, as well as decreased cognition and motivation, and finally, poor motor functioning. (3:126) However, Kardiner states, "The stresses of war create only one syndrome which though not unique to war conditions, is extremely frequent." (18:2) This syndrome he calls "battle fatigue," which is a state of being and not a process; therefore, the condition responds to treatment procedures of sleep, food, and a place of safety. On the other hand true neurosis does not normally respond to similar treatment procedure. Kardiner does indicate that war trauma can uncover previous neurotic syndromes. He describes trauma "as an imbalance between the environment and one's adaptive resources." (8:178) Kardiner indicates that a failure of this balance does not result in the soldier's regression as indicated by Freud and his colleagues. Kardiner further indicates that the most significant mark of the traumatic syndrome is the traumatic nightmare. Such nightmares include dreams of being overrun, ambushed, or the terror of hopelessness as friends or buddies are being killed. Often the dreamer

will visualize himself being killed or maimed. This is expressed as a sense of abandonment or loss of self-identity. Figley developed a definition of combat reaction that is meant to apply to all speculations and theories, "Acute Combat Reaction consists of behavior by a soldier under conditions of combat, invariably interpreted by those around him as signaling that the soldier, although expected to be a combatant, has ceased to function as such." (3:8)

### SIGNS OF COMBAT STRESS

It is critical that the combatant knows the signs of combat stress, and realizes there is a "breaking point." These lessons were learned from World War I and still apply today, that is, every soldier will experience some level of combat stress and each person has a tolerance level. The traumatic experiences of war may break through the soldier's defenses which result in a psychiatric casualty. This can refer to a number of reactions or symptoms such as severe tremor, shaking, muteness, hallucinations, uncontrollable crying, and panic. Some soldiers may experience pre-existing psychotic disorder, display poor appetite, increased startle response, careless exposure to danger, nightmares, aggressive behavior, and drug and alcohol abuse.

Army Field Manual 26-2, "Management of Stress in Army Operations," lists seven sources of battle stress.

1. Fatigue--fighting without rest and sleep.
2. Mental stress--resulting from excessive fear, anxiety, and uncertainty which impairs judgement and the decision process.
3. Light level--fighting in an environment of decreased light which detracts from combat performance, i.e., seeing landmarks, maps, etc.
4. Battlefield demands--intense demands such as nuclear, biological, and chemical responses which enhance stress.
5. Isolation--individual soldiers will experience greater separation, and will lack personal support of other soldiers.



6. Adverse conditions--such conditions as adverse terrain or weather, and decreased visibility from smoke and dust.

7. Day and night rhythms--soldiers will be caught in continuous day and night operations which will impact upon normal routines. (38:12-13)

Some of the physical signs of normal combat stress are also listed in 26-2--rapid heartbeat and palpitations, muscular tension, frequent urination, incontinence, perspiration, and nausea and vomiting.

In the final analysis, stress on the battlefield is significant and its impact can remove a soldier from duty as effectively as a bullet wound. A primary concern for soldiers in all our wars has been the conflict between performance of duty and self-preservation. Therefore, in the next chapter I will focus upon our experience with combat stress in previous American wars.

## Chapter Three

### COMBAT STRESS IN PREVIOUS AMERICAN WARS

Discussion of American combat stress has been documented in the literature throughout American history. Comments concerning stress in the Revolutionary War warned of "fever," which was "produced by the sudden change in the manner of sleeping, living, etc. It was prevented, in many cases, by the person lying for a few nights on a blanket before the fire." The "irritable heart syndrome" was also a manifestation of anxiety described by many Civil War soldiers. (13:222)

William Hammond, Surgeon General of the Union Army (1883), also described a condition called "nostalgia," and he developed a treatment technique of retaining patients in the combat zone in an attempt to lessen their stress by keeping busy with nonstressful work. This plan would not be used again until a century later. The incidence of "nostalgia" in the Civil War was reported as 5213 cases in the first year of the war, or 2.34 per 1000 troops. This figure rose to 3.3 per 1000 in the second year. (2:9)

### WORLD WAR I

It was not until World War I that a concerted effort was begun to assess the effect of war on the soldier's psyche. Prior to this time, and during the initial phases of the war, psychiatric casualties were seen as lacking moral fiber, weak, or cowards. One of the earliest theories was that the "injury" was organic and a result of continuous artillery bombardment. Symptoms included paralysis, gross tremors, mutism, blindness, confusion, or intense anxiety, thus the term "shell shock." Such men were thought to have brain damage resulting from the concussion of high explosive shell blasts. This theory was abandoned when similar casualties occurred in soldiers with little or no combat exposure. Treatment methods established early in World War I, and used by both the French and English, were to evacuate psychiatric casualties to the rear of the front lines. Treatment was

primarily in civilian hospitals and public mental institutions, and often consisted of electric shock, threat of imprisonment, and in some cases execution. The British primarily evacuated casualties to England, thus the majority of casualties did not return to duty and a large number became chronically disabled. (2:12) The French began to realize those patients treated closer to the front recovered quicker and were able to return to duty. By 1916, both the British and the French began treatment in the forward areas and reported 66 percent of British casualties returning to combat and 91 percent of the French casualties returning to combat. (23:989)

Upon the entrance of United States forces into World War I, Thomas W. Salmon, who held the job as Commissioner of Mental Health for New York State, was assigned as senior psychiatric consultant to the surgeon general of the American Expeditionary Forces. Major Salmon learned from the experiences of the British and the French and developed a program that has changed little since World War I. (2:13) His program established three principles: immediacy, proximity, and expectancy--casualties were treated immediately, as near to the front as possible, and expected to return to combat. The most effective treatment was performed at clearing stations near the front; however, effective treatment was also provided by the soldier's comrades who provided encouragement, the opportunity to rest, and the support to remain in combat. Major Salmon also established a network of services by assigning a psychiatrist to each division and instructing them in the establishment of the three echelon system. The first echelon was the Division Psychiatric Facility, where treatment ranged from three to ten days and consisted of reassurance, sleep, and relief from combat. The second echelon was the Neurological Facility, which received the more difficult casualties from division where treatment extended from two to three weeks. The third echelon was the Psychiatric Base Hospital, located in the rear where treatment was prolonged and casualties were evacuated to the United States. (23:999) These radical changes combined with the expectancy that the casualty would return to duty established a rate of 65 percent return to duty.

As the war drew to a conclusion, the allied medical services had begun to make significant advances in the identification and treatment of psychiatric casualties. The diagnosis of "war neurosis" or "traumatic neurosis" was established rather than "shell shock." However, this terminology established a disease concept and consequently a prevailing opinion was established that psychiatric

casualties were predisposed as a result of faulty personality. This concept also flowed into civilian psychiatric practice and a special category was established called psychoneurosis. The successes accomplished by the medical services, and Major Salmon in particular, were not fully incorporated into medical procedures and as the war ended so did the treatment concepts. The lessons would be ignored initially in World War II.

## WORLD WAR II

The United States entered World War II fully unprepared to cope with psychiatric casualties yet the British Army was prepared as they had based their psychiatric treatment on the programs established by Major Salmon in World War I. (2:15) The United States Army had deleted psychiatrists from the division and the field hospitals did not have psychiatric treatment teams. The reasons for this vary but essentially it was thought that World War I was not applicable to the more mobile and mechanical warfare of World War II. Many psychiatrists felt that the "disease" criteria of trench warfare would not apply to the open battlefield of tanks, machine guns, and air power. This logic proved erroneous and without proper psychiatric care many psychiatric casualties became chronically disabled.

The test would first come in North Africa in the winter and spring battles of the Tunisian Campaign of 1942 and 1943. This was the first battle where large numbers of psychiatric casualties were reported. Once again the diagnosis was psychoneurosis with the implication of unresolved personality conflict. Blame was placed on the induction screening process for its alleged failure to weed out personalities unfit for combat. As a result, few psychiatric casualties were returned to combat duty and many were evacuated to the United States. Lieutenant Colonel Roy R. Grinker and Major John P. Spiegel were actively involved in the treatment of North African psychiatric casualties. Their method of treatment was primarily directed at alleviating the overwhelming stress and anxiety experienced by these first casualties. Their methods utilized the principles of catharsis which were facilitated by brief psychotherapy and intravenous injection of barbiturates. (6:77) The goal of therapy was to release anxiety and to surface the repressed battle experiences. This method had moderate success; however, few casualties were actually returned to combat.

It was late in the Tunisian Campaign (March, 1943) that the term "exhaustion" was first officially established.

This term seemed to best describe the type of behavior seen on the battlefield. War correspondent Ernie Pyle described the behavior quite vividly,

For four days and nights they have fought hard, eaten little, washed none, and slept hardly at all. Their nights have been violent with attack, fright, butchery, and their days sleepless and miserable with the crash of artillery. The men are walking . . . Their walk is slow for they are dead wary, as you can tell even when looking from behind. Every line and sag of their bodies speaks their inhuman exhaustion. On their shoulders and backs they carry heavy steel tripods, machine-gun barrels, leaden boxes and ammunition. Their feet seem to sink into the ground from the overload they are bearing. They don't slouch. It is the terrible deliberation of each step that spells out their appalling tiredness. (23:991)

The term exhaustion was more readily accepted by the combatant and did not imply personality weakness. This also communicated "every man has a breaking point." All men were potential psychiatric casualties. The symptoms displayed were primarily tension, tremor, irritability, noise sensitivity, and a verbalized inability to "take it anymore." (23:992)

It was not until the Normandy invasion; however, that the medical corps applied the principles established by Major Salmon in World War I. Unfortunately the lessons learned were costly--500,000 persons were discharged from the Armed Services in World War II for psychiatric reasons. (2:15) The most significant cost was that many of these casualties had become permanently disabled. Had they been treated with the proven techniques of World War I, perhaps the cost could have been altered. The rate of psychiatric casualties was as high as 101 per 1000 troops, per year, for the First United States Army in Europe. (2:15) This figure is biased, as data is included from the end of the Battle of the Bulge to the end of the war when casualty rates were low. In fact, line regiments often had rates as high as 1600 per 1000 per annum. (44:5)

Although the medical services had to relearn Major Salmon's principles of psychiatric care, the experiences of World War I had taught that psychiatric casualties were not organically based but mainly a psychological disorder. The experience also confirmed that battle stress is directly related to battle intensity. This was clearly

Shown in the Battle of Metz from September to November, 1944. The 5th Infantry Division suffered heavy losses in killed and wounded, and approximately 1000 psychiatric casualties. Ninety-two percent of these were members of the division's three infantry regiments (see Table 1 for statistical evidence given by Nesmith). (44:35) This amounted to a ratio of one psychiatric casualty per nine infantrymen. (26:35) Battle intensity and psychiatric casualties were further indicated in the 6th Marine Division's battle on Okinawa, 12-21 May, 1945. The Marines had 1289 psychiatric casualties and 2662 wounded in action. (44:6)

The most significant lesson learned from World War II psychiatry was the recognition of the combat group or "group identification"--the "buddy system." These groups were often the sustaining power of the individual soldier. The group maintained a sense of cohesion and sustained the individual through intense battle conditions. This was further evident in elite forces such as the airborne. The high morale, esprit de corps, and effective leadership in the three airborne divisions resulted in a psychiatric casualty rate of approximately 5.6 percent of the wounded in action (see Table 2). (44:19) A final lesson learned from World War II was that many observers noted psychiatric casualties were often the newest or the oldest members of a given unit. The newer soldier had often not become identified with the buddy system and had not experienced the self-confidence or the "hardened" experience of the "old soldier." However, the "old soldier" was equally at risk and often became a psychiatric casualty due to repeated traumatic events and failure to maintain control; thus, a gradual loss of esteem and self-confidence. From this the term "old sergeant syndrome" was derived. (23:996) As rotation from combat was instituted, fewer such casualties resulted. This would be a more common practice in Korea and Vietnam.

#### KOREA

The lessons learned from World War II were not forgotten; however, in the five years following World War II most of the medical services personnel had left the Army. When the Korean War started the Army was once again unprepared to cope with the large number of psychiatric casualties, which approached the levels of World War II. The three echelon program was not developed and instead, plans were underway to build a major psychiatric hospital in Japan. Before this plan was operational Colonel Albert

"A" Infantry Regiment . . . . .	33.4%
"B" Infantry Regiment . . . . .	25.1%
"C" Infantry Regiment . . . . .	33.7%
Attached Tank BN. . . . .	0.4%
"A" Field Arty BN . . . . .	0.2%
"B" Field Arty BN . . . . .	0.4%
"C" Field Arty BN . . . . .	0.4%
"D" Field Arty BN . . . . .	0.2%
Attached Tank Destroyer BN. . . . .	1.0%
Engineer BN . . . . .	1.1%
Medical BN. . . . .	0.8%
QM CO . . . . .	0.1%
Ordinance CO. . . . .	0.1%
All Others. . . . .	3.1%

Table 1. 5th Infantry Division: 1000 Psychiatric Casualties

Combat period and location	Number of days in combat	Total number casualties	Number of neuropsychiatric cas.	Percentage of neuro-psych. cas.
82d Airborne Division				
6 June-2 Aug, 1943, Sicily	58			
14 Sep-1 Oct, 1943, Italy	17			
6 Jun-13 Jul, 1944, Normandy	38	4,196	237	5.6
17 Sep-17 Nov, 1944, Netherlands	61	4,630	261	5.6
17 Dec 1944-17 Feb, 1945, Battle of the Bulge	61	7,824	307	3.9
4-18 Apr 1945, the Ruhr	14	530	7	1.3
25 Apr-9 May 1945, the Elbe River	15	357	2	.6
101th Airborne Division				
6-25 Jun 1944, Normandy	19	2,704	80	3.0
17 Sep-27 Nov, 1944, Netherlands	71	3,972	151	3.8
19 Dec 1944-31 Jan, 1945, Battle of the Bulge	43	4,992	102	2.0
17th Airborne Division				
25 Dec 1944-10 Feb, 1945, Battle of the Bulge	47	3,020	43	1.4
24 Mar-19 Apr, 1945, Rhine Crossing	25	2,143	28	1.3

Table 2. Psychiatric Casualties in the Airborne: 82nd, 101st, and 17th Airborne Divisions (European Theatre)



Glass, consultant to the surgeon, Far East Command, had implemented an in-country plan which prevented the errors of previous wars. He began the three levels of treatment which resulted in a 65 to 75 percent return to duty of psychiatric casualties. By October, 1950, Colonel Glass had not only established the three levels of psychiatric care but he had also utilized the battalion and regimental medical officers as front-line psychiatrists. This plan freed the division psychiatrist to function as a consultant. The psychiatrist was able to instruct the medical officers in methods of combat treatment and assist with more difficult cases.

Psychiatric treatment began at the battalion level and was limited to 24 to 48 hours. The more severe cases were evacuated to the rear, yet within the combat zone, and within reach of the soldier's unit and source of emotional support. The most difficult cases were evacuated to Japan and all such cases were re-evaluated after three months. Approximately 40 percent of these casualties were returned to Korea and combat, if needed. This allowed casualties to regain their esteem and to re-establish the emotional bond with their unit.

Psychiatrists in the Korean War continued the principles of combat psychiatry established in World War I and World War II. They had begun to move from the rear treatment zone to the combat zone and consequently developed greater confidence in handling combat casualties, as well as a sense of the unit mission. This had previously created conflict, as the psychiatrist often over-identified with his patient and experienced guilt at the prospect of returning his patient to combat. From this experience the psychiatrist realized that it was in the best interest of the soldier to return to his combat unit as this allowed the soldier to regain confidence and ultimately prevented chronic disability.

A final, yet significant, psychiatric development occurred five years following Korea. The Veterans Administration Mental Hygiene Clinic in Los Angeles, California, began to treat new cases of combat stress that had never been treated before. From this group it was noted that many were noncombatants. These soldiers had experienced battle indirectly as corpsmen, graves registration personnel and crash crews. Their work often included identification of those killed in action and identification of body parts. This group had no means of active retaliation and consequently internalized the experiences which came forth years later in the same fashion as acute combat stress, i.e., intense anxiety, recurrent

battle dreams, startle reaction, tension, depression, guilt, and explosive behavior.

The Los Angeles Veterans Administration study further uncovered a second factor that had not been presented in the literature. These patients had experienced guilt secondary to killing, or injuring defenseless civilians or enemy soldiers. If the action was "kill or be killed," the soldier was given authority by the military code or group conscience. However, to shoot an unarmed enemy or noncombatant resulted in issues of morality and conscience. Such conflict was often repressed and reappeared several years after the war. This same phenomena would appear once again following Vietnam and it would be identified as "Post Traumatic Stress Syndrome."

#### VIETNAM

Unlike previous wars, the United States was fully prepared to manage psychiatric casualties in Vietnam. Every prediction indicated high rates of psychiatric casualties. A number of factors were suggested to indicate such high rates: the demands of jungle warfare, an unseen and ever present enemy, the lack of clear battle lines, and political conflict on the home front. (35:1586) Such predictions were not realized and the incidence of psychiatric casualties in Vietnam were lower than in any previous conflict. (35:1586) The actual psychiatric casualty rate of 12 per 1000 troops per annum was the same incidence of psychiatric problems requiring hospitalization in the United States. (17:125) As indicated previously, the rate in World War II was 101 per 1000, and 37 per 1000 in Korea. Six percent of all medical evacuations out of Vietnam were for psychiatric reasons, compared to 23 percent of all medical evacuations in World War II. The reasons for such a low rate have been discussed throughout the literature and basically are related to the significant awareness of the major commands. The commands had applied the lessons learned dating back to World War I and to Major Salmon's program of immediate treatment in the proximity of the battle area and with the expectancy that each man will return to duty. Emphasis had also been placed upon increased training of medical staff, improved and reliable equipment, enhanced leadership, and rapid medical evacuation. (17:487) The helicopter was not only a part of rapid medical evacuation but also part of quick release to safety. The helicopter was also used to bring hot meals to combat soldiers, resulting in higher morale and decreased sense of alienation. In general, most studies suggest that morale in Vietnam was better than observed

during the Korean War or during World War II. (35:1586)  
The troops not only had excellent training which contributed to good esprit de corps but they could rely upon a high caliber of medical staff which greatly lessened their anxiety. The soldier knew if wounded, he would be evacuated to modern medical facilities within approximately 20 minutes. Such immediate care resulted in a survival rate of 98 percent. (2:83)

The type of battlefield in Vietnam was also a factor which contributed to low psychiatric casualty. The intensity and lethality of continuous bombardment was not experienced as in World War II. The enemy lacked significant capacity in weapons of indirect fire, and most fire fights were brief, mobile, light infantry operations, with air superiority, and as stated above, immediate medical care. (44:1) For some soldiers; however, the battlefield was often endless patrols, ambushes, and close combat. Many spent almost their entire tour in combat. The one escape from the ever present threat was the completion of their 365 day tour. Survival on a day-to-day basis was the primary concern of the combat soldier, and to a similar degree for support forces. In essence, each soldier had a one-year contract, a DEROS. His war began the day he arrived in Vietnam and ended on the completion of his contract. No longer did the soldier stay to see the end of the war or to leave due to wounds as in World War II.

In World War II the significance of unit morale and esprit de corps established a more effective "primary group" identification, or the buddy system. (2:127) Soldiers in Vietnam were often assigned individually and departed the same way which broke down the solidarity of the small unit. Many researchers have indicated that lower psychiatric casualty rates were based upon the 12 month tour, yet unit identification and cohesion were the criteria which maintained soldiers in World War II. It is evident that command made every effort to eliminate previously known factors of psychiatric breakdown.

Another attempt to offer release from the intensity of combat was the creation of an "air conditioned war." (3:vii) The soldier was able to leave the stress of battle to the comfort of air conditioned rest and recuperation, and to maintain telephone contact with family and friends in the United States. The soldier was also able to escape the reality of combat by acquisitions of material goods such as cameras, hi-fi sets, and tape recorders, or to indulge himself in the many bars and brothels. (17:485) However, these avenues of escape were also means of furthering the

distance from unit cohesion, discipline, and an enhancement of the individualistic approach to combat. Such a military-civilian relationship had also existed in World War II as soldiers were authorized home leave. (25:279) This leave appeared to effect morale and to decrease military discipline, often resulting in AWOL charges. The Vietnam home leave came at the completion of the tour, yet the influences of mass media and communication with home kept the soldier from maintaining close emotional ties with his unit. The exception to this pattern was noted in the elite combat units such as the Special Forces, Airborne, SEAL teams, and aircrews who displayed more unit cohesion and esprit de corps.

In the latter phases of the Vietnam War, psychiatric casualties remained much the same as previously indicated; however, some researchers dispute the data. (3:18) Just as "bodycount" and the number of hamlets "pacified" were not true indications of successful combat, neither was the low rate of psychiatric casualties an accurate accounting. Other factors appeared which challenged the accuracy of the data such as heightened racial tension, increased drug use, erosion of discipline resulting in increased acts of assault and insubordination upon NCOs and officers, and finally, the reported increase of "fragging." Figley suggests that the low psychiatric rate is misleading and perhaps should include the above criteria. Such behavior is a soldier's reaction to combat and a means of release, thus a part of the combat stress syndrome. (3:20)

In the final analysis, Vietnam has shown the evolution of combat psychiatry, and it has shown that the psychiatric casualty can be treated effectively by the proven techniques developed by Major Salmon in World War I. Vietnam has also shown that the average soldier can adapt to the combat environment at both a psychological and physiological level. A study by Dr. Bourne of a helicopter ambulance crew and a Special Forces "A" team has indicated soldiers involved in unique and highly stressful combat can adapt. These men had over time utilized very extensive and effective psychological defenses to cope with the constant threat of death. Their coping ability was substantiated at a physiological level by monitoring steroid excretion (17-OHCS) levels. (2:92) (This analysis has long been accepted as a specific measure of stress.) The established steroid levels had reached normal ranges, and lower than normal for some of the soldiers. These lessons learned from Vietnam, and the evolution of combat psychiatry would be further adapted by the Israelis, and offer renewed focus by the American Armed Forces.

## Chapter Four

### THE ISRAELI EXPERIENCE

This chapter will focus upon the Israeli war experiences and their unique contribution to combat psychiatry. This evolution began with their War of Independence of 1948-1949, and moved through the Suez Campaign of 1956, the Six Day War of 1967, the Yom Kippur War of 1973, and lastly, the Lebanon War of 1982.

#### WAR OF INDEPENDENCE

The Israeli wars, with the exception of the Lebanon War, were wars of survival. The threat to Israeli survival prompted a close national relationship and recollection of the holocaust, and the threat to the entire Jewish people. The Israelis have most often perceived themselves as the underdog, and by necessity had established a strict self-defense and survival posture. Such a lifestyle directly influenced military strategy as well as the individual soldier and the general population who feared being overrun and thrown into the sea. Therefore, due to such a strong perception and a unified need for survival, the combat reactions of the War of Independence were quite small. The Israelis had two small psychiatric units during this war; however, there was no treatment of psychiatric casualties in or near the forward areas. (13:271) The low incidence of psychiatric casualties was quite surprising as many factors were present which suggest high risk for psychiatric casualty. Such factors were the training of the military, many immigrants including holocaust survivors, many of whom could not speak Hebrew, and Arab refugees who had been inducted into the Army. Moses and Cohen suggest the small number of casualties were due to two factors: high motivation to defend in a war of survival, fought on their own land, and the concept of "identification threshold." This term suggested that Israeli soldiers had a high threshold against combat stress due to significant identification with their unit and a desperation to win and survive as a country and a people. (13:274)

### SUEZ CAMPAIGN

In 1956, the Israelis fought their second war, the Suez Campaign. This war was short and successful perhaps due to the continued high identification threshold. As a result few psychiatric casualties were encountered, and no formal psychiatric program was established.

### SIX DAY WAR

The Six Day War of 1967 was the third significant war and one in which the military began to prepare for psychiatric casualties. The three and a half weeks of waiting before the war allowed medical authorities to prepare and to formulate a treatment plan. The number of casualties actually treated was quite small; however, Moses and Cohen indicated that a number of soldiers who experienced combat stress did not become visible until the next conflict, the Yom Kippur War of 1973.

### YOM KIPPUR WAR

The Yom Kippur War caught the Israelis by complete surprise and Israel was initially overwhelmed by the Egyptian Army in the south and the Syrian Army on the northeastern front. Due to a lower identification threshold and lack of preparation, the Israelis suffered relatively high psychiatric casualties. Such a loss came as a shock to the general population, and for the first time in Israeli history, the country also lost the underdog status. This was primarily due to their territorial expansion and national ego. (13:226) This war was equally short and intense. It lasted nearly four weeks, caused heavy casualties, and was fought 24 hours a day in the initial stage. The battles were primarily with armor and infantry, and supported by artillery and air. This resulted in a very mobile and fluid battlefield. As a result of such intense and highly lethal combat, the Israelis suffered a high rate of psychiatric casualties. The ratio of psychiatric casualties to wounded was 30:100 or 23 percent of all non-fatal casualties. (36:2)

Treatment of psychiatric casualties had not been formalized primarily due to limited preparation from previous wars. As a result of limited preparation, casualties were evacuated to the rear and treated in civilian hospitals. This pattern of treatment was less effective and consequently few soldiers were returned to combat. The

Israeli command had realized the failure and in the years following the war a concerted effort was begun to establish formal doctrine of identification and treatment. The Israeli medical corps began by first establishing basic casualty classification. The primary focus was upon the distinction between battle shock (combat stress) and battle fatigue. Battle shock was defined "as a simple emotional reaction to the stress of battle." (36:3) This reaction was acute and occurred within hours or days following battle. Battle fatigue occurred after weeks or months following moderate combat. Battle shock was identified by three stages. The first stage occurred within several hours and was identified by anxiety, depression, and fear. The second stage occurred in several weeks and the symptoms were primarily neurotic and influenced by the soldier's personality. The third or chronic stage was severe psychiatric presentation with slow or incomplete recovery. (36:3)

The Israelis also experienced a new psychiatric casualty identified as Delayed Battle Shock, or in American terminology, Delayed Stress Reaction. Such a reaction in some soldiers did not occur until days or weeks following the battle. Many Israeli soldiers broke down on their first leave home. Battle stress casualties on the Suez front were treated in hospitals in the Sinai, but later evacuated to Tel Aviv or Jerusalem. These soldiers often relapsed into more serious psychiatric conditions, or delayed battle shock.

The Yom Kippur War became a significant learning process for the Israeli Command. The command had realized that the intensity of battle was more significant than the duration of battle. As battle intensified, battle shock increased. But before the onset of battle fatigue or sleep deprivation, the Israeli soldier learned he could adequately perform if he maintained three to four hours of sleep in a 24 hour period.

Armor was most heavily engaged in combat, yet rates also varied dependent upon unit training, morale, and esprit de corps. Individuals also displayed limited degree of battle shock dependent upon group cohesion, unit identification, and whether or not the individual experienced interpersonal or family conflicts. Personality structure was not a factor for becoming a psychiatric casualty; however, if combat stress occurred, recovery was more likely if the soldier had a well adjusted personality.

One of the most important lessons learned was treatment in civilian hospitals did not promote recovery. Civilian

hospital staff generally undermined the soldier's recovery by their acceptance and pity which prolonged treatment, and often resulted in chronic disability. (36:6)

The Israeli medical staff began an analysis of American psychiatric doctrine, and as a result, developed the basic concepts of immediacy, proximity, and expectancy. The Israelis planned to treat casualties as far forward as possible, and to evacuate casualties by ground transport rather than helicopter. This allowed casualties to maintain close proximity to their unit and a limited break in their source of unit cohesion. If casualties were unable to return to their units, they were evacuated farther to the rear. However, casualties were expected to maintain standard military bearing and behavior, and each was expected to return to his unit when possible.

The Israeli Defense Force (IDF) also established organization changes following the Yom Kippur War. Of primary significance was the establishment of a psychiatric team assigned to each medical battalion at the division level. The team's responsibility was to provide first echelon treatment for battle shock casualties. This meant holding casualties for 24 to 72 hours. Second echelon treatment was located in military facilities near Tel Aviv or Jerusalem, and treatment was for approximately two weeks. The organizational changes would become the mainstay of psychiatric treatment during the Lebanon War of 1982.

#### LEBANON WAR

The Lebanon War of 1982 was notably different than previous Israeli wars. This war was fought as planned by the IDF and all staff, medical staff included, were well trained for this war. However, the war produced significant medical and psychiatric casualties.

From June to December 1982, the IDF suffered 2600 wounded and 465 killed in Lebanon. During this same time, the IDF suffered 600 psychiatric casualties, primarily battle stress, and a psychiatric casualty to wounded ratio of 23:100. Unfortunately, 80 percent of the wounded including psychiatric casualties were evacuated to the rear. (36:11) The IDF medical corps established rapid air evacuation to the rear. This was contrary to planning doctrine following the 1973 war; however, the IDF realized the error and established a second echelon treatment facility in northern Israel, rather than Tel Aviv or



Jerusalem. Forward treatment was fully operational, located 2-20 kilometers from the front, and staffed by teams of five members, usually one psychiatrist, one psychologist, and two or three social workers. The forward teams held casualties 48 to 72 hours and returned them to their units or evacuated them to the rear.

These teams provided very effective treatment which consisted of objective interviews to ascertain the facts of the soldier's experience. Such an interaction usually lessened the emotional conflict and was followed by six to eight hours of physical comfort, primarily a warm meal, rest, and further opportunity to engage in supportive group and individual psychotherapy. Some of the more aggressive teams were able to return 95 percent of battle stress casualties to their units. (36:14) Prior to medical release, the casualty was visited by members of his unit, and returned to his unit by friends, thus alleviating any stigma and enabling the casualty to experience a sense of value and identification with his unit.

These advanced medical battalions were able to return on an average 60 percent of the battle stress casualties to their units within 72 hours. (36:16) Those casualties needing more intense care were evacuated to the rear by ground transport. Helicopters would no longer be used to transport psychiatric casualties. Of the 600 psychiatric casualties, 60 were evacuated beyond the first and second echelon treatment areas. These 60 casualties were treated at Combat Fitness Retraining Units (CFRU), located at sport centers in central Israel. Treatment was performed by a staff of psychiatrists, psychologists, social workers, and athletic coaches. Treatment was primarily individual and group psychotherapy, sports, and combat oriented military training. The average length of stay was 26 days. Upon completion of treatment, none of the soldiers needed further care. (36:17)

In conclusion, the IDF confirmed the basic tenets established by the US Medical Corps in World War I, i.e., treat psychiatric casualties as far forward as possible to insure quick recovery, and return of critically needed soldiers to their units. The IDF also confirmed the impressions gained from previous wars, that personality has little impact upon psychiatric casualties, but personality structure does influence recovery. Finally, the IDF established the value of morale, often described as the secret weapon of the IDF. Those units with high morale received fewer psychiatric casualties.

As mentioned at the beginning of this chapter, the issue of survival was paramount for the Jewish people.

Such a purpose had come from many who had survived the holocaust. Their battlefield had been different, but certainly a battlefield. A similar battlefield would also be fought by American servicemen in Korea and Vietnam as prisoners of war.

## Chapter Five

### POWs AND COMBAT STRESS

The previous chapters have shown the reactive states of soldiers who experienced the trauma of battle. Their reactions were caused by the overwhelming fear of death and mutilation. This battlefield with its tanks, bombs, and bullets was not the only one to produce psychiatric casualties. As stated in the previous chapter, the Jewish people also fought their battles for survival in concentration camps across Germany and eastern Europe. We have learned from these survivors of the holocaust and from our own prisoners of war that they too experience combat stress reaction.

Dr. Paul Friedman has studied many of the survivors from the concentration camps, and he stated, "In all the survivors of the Nazi camps, one might say, the self-preservation instinct became so dominant that it blotted out all the other instincts." (20:604)

Dr. Viktor E. Frankl has written of his struggle to survive such death camps. (4:27) He too learned of man's spirit to survive. He searched for a purpose, a meaning to all the death and destruction, and his answer came from within himself. This internalization helped the prisoner find a refuge from emptiness, desolation and spiritual poverty, by letting him escape into the past. (4:61) Dr. Frankl's past was his relationship with his wife, whose whereabouts he did not know, but who would die in a similar camp. He often carried on an active conversation with his wife as if she were standing at his side.

I was again conversing silently with my wife, or perhaps I was struggling to find the reason for my sufferings, my slow dying. In a last violent protest against the hopelessness of imminent death, I sensed my spirit piercing through the enveloping gloom. I felt it transcend that hopeless, meaningless world, and from somewhere I heard a victorious "yes" in answer to my question of the existence of an ultimate purpose. (4:63)

Dr. Frankl described two primary phases experienced by the prisoners. The first phase was shock. At this initial point the prisoner did not fear death or even the gas chambers. Most may have thought of suicide; however, even this act no longer was frightening. After a number of days or weeks, the prisoner passed into the second phase, apathy, or as Dr. Frankl called it, an "emotional death." (4:31) Death and dying had become so commonplace to the prisoner that his emotions became blunted. He had become desensitized to the most inhumane treatment man could inflict on his fellow man. However, desensitization would become the most difficult symptom to treat upon the prisoner's release from the concentration camps. His emotions had become insulated and hidden from conscious awareness. For many it would take months or years of treatment to once again trust or love another. However, for some the process of re-entry into society was too difficult and resulted in suicide. For others symptoms persisted such as insomnia, irritability, depression, difficulty concentrating, defects in short-term memory, increased startle reaction, social isolation, and chronic ill health. (40:110) For Dr. Frankl his return to the living was described as, "The crowning experience of all, for the homecoming man, is the wonderful feeling that, after all he has suffered, there is nothing he need fear any more except his God." (4:148)

Many of these same experiences were to be identified by American servicemen captured during the Korean War and the Vietnam War. Dr. Henry A. Segal examined many of the released POWs in Korea, and one of the most evident characteristics was the apparent "suspension in time." (32:360) The POWs had little sense of identity, and it was evident that the enemy had exploited every possible opportunity to deny leadership, thus the breakdown of group unity, discipline, and the loss of morale, and esprit. (32:362) As a consequence, the prisoners became isolated, depersonalized, and very vulnerable to propaganda, thus a number of soldiers defected at the end of the war.

Like the prisoners of Nazi concentration camps, the American POWs of Vietnam were to fight a daily battle for survival. Their fight was also against physical torture, followed by long periods of depression and hopelessness. The number of POWs returned from Vietnam was 766, a relatively small number compared to the 7,140 POWs from World War II. (3:190) The majority of the POWs from Vietnam were officers and aircrew members. Those who were

returned in 1973, included 325 Air Force, 77 Army, 26 Marine Corps, and 138 Navy. (3:190)

These men experienced much the same trauma as previous POWs and those from concentration camps. Their first reaction was also shock, confusion, and a sense of unreality. Colonel Thomas H. Kirk, USAF, describing his shoot-down stated, "the traumatic experience came from the complete comfort and home of that cockpit . . . A minute later you're in a savage world . . . You know all is lost. In essence, that's the feeling. You ask yourself: "'God; what can it be?'" (12:34) For men like Colonel Kirk, the POW experience would extend from months into years. Many would be severely tortured and forced to write anti-war statements, and to take part in films and tapes confessing war crimes. Such statements left the POW feeling a sense of shame, guilt, and abandonment. His expectation was that of holding out, giving only name, rank, serial number, and date of birth; however, no one could hold out against severe torture. A sense of failure followed, and the thought that he did not display sufficient courage. Lieutenant Commander Richard Stratton, USN, experienced these feelings and the subsequent humiliation of "rolling over." "After they broke me, I felt I had betrayed my country and my fellow men and my officer corps." (1:100) His pain and sense of failure was so great he attempted suicide,

In a desperate, perhaps instinctive, effort he attempted to harm himself as he had been instructed in survival school. He tried to dash his head against the floor, and to hyperventilate. He was stopped immediately. He had nothing left. (1:96)

The strength of self-preservation is great, yet these men were forced to levels beyond their control, and often to a point of self-sacrifice, or suicide. Colonel Robinson Risner, USAF, also was pushed to this point. His pain from torture was so great that he attempted to choke himself, failing that, and with no further will to resist, he agreed to "talk."

When I saw I wasn't going to be able to hold out any longer, I prayed, "God, you've got to help me. I can't afford to give in. I'd be a traitor." I believed that with all my heart. It was unthinkable that I could be brought to a point where I would have to give in. I couldn't even destroy myself. (11:95)

Such was the POW's guilt and shame at having confessed or having "rolled over" according to POW jargon.

The remarkable fact was the majority survived. Perhaps the two most important weapons of survival were the POW military organization and a communication system. The senior ranking officer (SRO) in each camp, and in each cell block, became the commander, set policy, and established a system of resistance. Communication and the tapping code were life saving practices, as most men relied upon the tapping code for moral support and emotional encouragement. Most of the POWs have stated that communication was the primary reason they survived.

A study of POW survivors conducted by Borg, McCubbin, and Hamilton suggests there are four overlapping phases within the POW stress reaction experience. These are the anticipatory or threat phase, the impact phase, the recoil phase, and the post-traumatic phase. (40:128)

The anticipatory phase is described as future orientation or contingency planning. The individual may plan for possible mishaps, i.e., air crash, shootdown, etc.; however, denial is strong as evidenced by their attitude of "it only happens to the other guy." Most plan a positive future action and maintain that death occurs only to others. However, the group in this study were all pilots and upon shootdown all were immediately captured. These men had no time for anticipatory planning or the illusion of invulnerability. Each at some point shortly after shootdown felt he would be killed. To the contrary, each was captured, beaten, placed in isolation, and tortured. These events broke down the anticipatory phase resulting in a loss of future plans, identity, and a sense of helplessness.

The impact phase continues throughout the period of stress, and is concerned with the here and now. The individual initially becomes more physically tense and alert to the new circumstances. At this time the POW may become passive-aggressive, and resist his captors. However, if this phase is prolonged behavior becomes more automatic and passive. The POW will begin to lose his alertness and merge into a stress reaction. This behavior was greatly delayed by the POW military organization and the morale boost of extensive communication. This phase was often intensified or lessened depending upon the POW's group identity, or his forced isolation.

The recoil phase begins at the end of confinement. The symptoms are primarily a flooding of emotional and cognitive function. The returned POW may experience time

distortion and limited recall of stressful events, or if he failed to adapt as expected, he may experience greater guilt and a loss of self-concept. This reaction is greatly provoked if the POW had been rejected by his peer group, and if unresolved, the POW will experience chronic anxiety, depression, fatigue states, recurrent dreams, guilt, anger, and aggression.

The post-traumatic phase begins as the POW has fully re-adjusted his sense of self. He has been able to establish emotional and cognitive function and he is able to recall the stressful experience. Success of this phase is dependent upon the individual's ability to share the emotional trauma with his peers and family. If this phase is unresolved, the individual will experience much the same conflict as the POW who had been rejected by his fellow POWs.

Another study of the psychiatric conditions of returned POWs was conducted by Dr. S. William Berg in 1973. (40:110) Dr. Berg's study was part of the medical follow-up of 241 returned POWs, and broken down into 138 Navy, 77 Army, and 26 Marines, (see Table 3) (No Air Force POWs in this study). Dr. Berg has indicated that all the POWs experienced adjustment reaction upon release from Vietnam. The initial symptoms were hyperactivity, euphoria, and insomnia. This phase quickly changed to more subdued activity and concern about the future, career, family, and the need to catchup. Most of the adjustment problems were personal and did not warrant formal diagnosis, i.e., depression, anxiety, and hyperactivity, (see Table 4). (40:112) These examinations indicated 5 percent of the returning Army and Navy POWs and 15 percent of the Marine Corps POWs were diagnosed neurotic. The diagnosis of transient situational adjustment was given to 5 percent of the Navy POWs, 15 percent of the Marines, and 25 percent of the Army POWs. (2:200)

The question is often asked, "How do some men survive, and others fail in POW camps?" The answer is not always tangible or testable. In many POWs the test of survival came down to a basic will to survive and to return with honor. Commander Robert H. Shumaker, USN, described it as,

I discovered something up there when I stopped to analyze who I was trying to satisfy. Was I trying to satisfy the demands of the President of the United States? The Secretary of the Navy? Was I trying to satisfy the demands of my wife? In the final analysis it was myself I had to

	POWs	MIA	Total
Army	77	367	444
Navy	138	177	315
Marine Corps	26	114	140
<b>TOTAL</b>	<b>241</b>	<b>658</b>	<b>899</b>

Table 3. Distribution of POWs and MIAs by Service\* in Vietnam.

\*US Air Force was not included in the study.



Problem	All Services	Navy	Army	Marines
Career	23	16	4	3
Depression	22	11	5	6
Anxiety	18	13	4	1
Adjustment to Injury	10	7	2	1
Hyperactivity	6	5	1	0
Number of prisoners of war: Navy = 138, Army = 77, Marines = 26, Total = 241				

Table 4. Prisoner of War Re-adjustment Problems

satisfy, myself I have to live with the rest of my days. I've got a little home in western Pennsylvania, and I just wanted to go back to that home and walk down the main street and be able to look at people in the eyes, and not be ashamed of what I did. (12:87)

Lieutenant Commander Stratton spoke of another ingredient to survival,

I am talking about faith in something: faith in God, faith in your family, faith in your country. Anyone who has strong faith in something has a greater survivability quotient. But if there is one essence to survival, a common thread, it is simply this: You have to want it. (1:362)

Dr. John E. Nardini, psychiatrist, spent three and a half years as a POW of the Japanese in World War II, and worked as a Naval psychiatrist for the subsequent 15 years, has also submitted his thoughts in answer to the above question. (30:299) He has indicated that a POW must establish a fatalistic philosophy, yet not a defeatist attitude. Hope is the prime ingredient, even in the face of the most severe hardships. Dr. Nardini suggests that the POW maintain "a proper balance between the great forces of self-preservation and a genuine interest in the welfare of one's fellow man . . . The intangible, indefinable, all inclusive will to live which in effect combines many of the above features." (30:303)

These men returned home with honor. Each realized his own physical and emotional breaking point; however, this did not in any way suggest he had dishonored himself, his country, or failed to abide by the Code of Conduct. These fighting men carried the battlefield into the prison camp, survived the inhumane treatment of their captors, and returned home with honor.

## Chapter Six

### PREVENTION AND TREATMENT OF COMBAT STRESS

The lessons learned by Israeli psychiatric combat teams following the Lebanon War and current literature have identified the extent of combat stress in the present and future combat scenario. This chapter will take these lessons learned and apply them against the threat presented by the Soviet Union and establish viable preventive measures against this threat, and finally, establish treatment techniques learned from previous wars.

The future battlefield will surpass the technology of Vietnam and Lebanon. Such technological devices will have advanced weapons far beyond those experienced by the American Armed Forces in Vietnam. All forces will experience the effects of high technology, high intensity, and high lethality. This combination means continuous 24 hour battle, and long periods wearing protective gear, as the battlefield will also have nuclear, biological, and chemical weapons (NBC). Such intense power will be brought to bear in blitzkrieg fashion. The resulting shock wave will undoubtedly increase psychological stress and the number of psychiatric casualties. (43:93)

### SOVIET UNION STRATEGY

Soviet strategy in the European theater places emphasis upon surprise attack and the shock of continuous operations to include conventional, air mobile, airborne, and the use of nuclear and chemical weapons deep within NATO defenses. Such a plan clearly endangers rear areas. In previous wars the rear was relatively safe and capable of maintaining command and control as well as logistical support. Soviet strategy is to strike with speed and force, and they intend to target rear support functions. This will disrupt or destroy resupply functions, medical evacuation, and troop reinforcement. (18:19) The Soviet strategy is concentration of mass, indirect fire power across and deep

within NATO defenses. This concentrated barrage and its shock effect is intended to stress and confuse NATO forces sufficiently to allow Soviet armor and mechanized infantry to bypass the front, and link up with the air mobile and airborne forces.

The Soviets expect NATO forces to be overwhelmed by shock, the stress of continuous battle, and loss of sleep due to day and night battle. The Soviets are aware of the psychological effects upon their own forces as well as the enemy; therefore they intend to maintain a high state of emotional and physical readiness. This they hope to accomplish by unit cohesion, esprit de corps, leadership, and stress management. The Soviets intend to capitalize on these factors and to minimize the same factors in NATO forces.

The Soviets realize forces caught in continuous indirect fire begin to experience feelings of isolation and abandonment, as well as the threat of death and mutilation. However, the future battlefield also holds the threat of laser blindness and the effects from radiation which further the horror of battle and increase psychiatric casualties. (18:20)

The Soviet plan is to seize upon these advantages, gain the initiative, and place NATO forces on a failing defensive ground. The intention is the total psychological breakdown of NATO forces, thus a collapse of any organized defense, the loss of Europe, and Soviet victory. (43:94)

#### BATTLE STRESS INOCULATION

Stress inoculation must take place before our forces enter the battlefield. The effects of realistic combat psychiatric training and extensive stress management were evident in the Israeli preparation for the Lebanon War. The US Army has also begun to formalize training of its NCOs and officers by having them attend classes on sleep and stress management. Also, mental health professionals are more actively involved in training exercises to develop increased battlefield expertise, and to assess the soldier's stamina, confidence, cohesion, and stress tolerance. (18:20)

The Academy of Health Sciences at Fort Sam Houston, Texas, has enhanced its combat psychiatry course taught to medical and mental health specialists, and advanced courses are taught to physicians and mental health officers.

However, the key to successful preparation for, and prevention of, combat stress is the commander. Commanders must be educated to realize psychiatric casualties are not cowards or weak personalities, but the result of high stress factors created by high intensity and high lethality on the battlefield. A commander who realizes these factors and incorporates them into his battle plans will enhance unit morale, cohesion, and esprit de corps. This was clearly learned by the Israelis following the 1973 war. The IDF conducted analyses of leadership, morale, unit cohesion, and the relationship to combat effectiveness. (26:38) Their results concluded that units with precombat readiness fostered by high levels of esprit, and unit cohesion, were the result of commander effectiveness, and the commander's projection of trust and competence. The study further stressed the commander's professional competence was the primary factor which influenced his trust in combat. The commander's competence was demonstrated by self-confidence, confidence in his soldiers, and the unit's weapons. (14:34) In the final analysis, a soldier who has effectively bonded with his unit and who has established a firm and positive view of his commander has also inoculated himself with an effective antidote against stress in any future battle.

A commander must also insure that combat training tests the unit's stress capability and he must monitor not only unit stress but also individual stress, and provide necessary inoculation. The Israelis conducted studies of "other life stresses" such as birth or death in the family, assignment to a non-elite unit, holding low rank, and identified these factors as contributors to psychiatric conflicts. (45:63) In order to counteract these risks, and to more effectively monitor combat units, the Israeli forces deployed mental health officers to measure morale, will to fight, and leadership. (36:24)

US Army consultation had also been established by Colonel Albert Glass during the Korean War to monitor and assess the factors of combat stress. Colonel Glass stated,

The psychiatrist, new to the service, cannot hope to achieve such military sophistication by limiting his professional activities to a traditional office or hospital practice. In order to acquire this background knowledge he must acquaint himself with the military environment, its rules, regulation, culture, mores, and operational procedures by frequent visits to various post or unit activities usually in connection with individual case referral. (15:33)

The consultation program established by Colonel Glass has continued in present Army facilities and its task is to analyze units quite like the analysis of an individual. The task for mental health officers is to review indicators of unit conflict such as referrals to sick call, mental health referrals, administrative separations, article 15 actions, court martials, Inspector General complaints, accident rates, chaplain referrals, and venereal disease rates as indicators of unit stress. (15:34) Units which appear to display higher levels of stress are advised of more formal interview, and with the authorization by the commander, individual consultation is conducted with the executive officer of the unit, the unit corpsmen, chaplain, and first sergeant. Once interviews have been completed with junior enlisted members, all data is analyzed, and findings are reported to the commanding officer. This type of assessment enabled the IDF to gage its combat effectiveness prior to the Lebanon War. If effectively utilized by American Forces, the reward on the battlefield will be decreased psychiatric casualties, thus greater combat capability.

The lowest level of stress inoculation, but perhaps the most important, is the individual soldier. The soldier must recognize stress in himself. He must be taught the signs that are most common (see Table 5), such as pounding heart, dry mouth, and tight stomach. Not only must he be armed to inoculate himself against stress, but also able to assist his buddy. The buddy system is the first echelon of care, and a sustaining force in combat. At this level the importance of trust and cohesion are paramount, and the beginning phase of treatment.

#### BATTLE STRESS TREATMENT

The treatment of battle stress remains the classic principles first established by Major Salmon in World War I. His principles of immediacy, proximity, and expectancy, have changed little. Treatment must be immediate and the casualty as well as the medical staff must expect the individual's return to combat.

The immediate phase of treatment is usually completed by buddy care or medical corpsmen. Treatment is supportive and encourages the casualty to ventilate his feelings of fear, guilt, or panic. In some cases the casualty must be removed from the battle to a safe area, perhaps to a battalion aid station in Army doctrine or a second echelon (2E) in Air Force doctrine. Here the casualty is treated from six to eight hours, primarily with crisis intervention techniques which includes a hot meal, adequate shelter,

**AGGRESSION.** The person feels anger, sometimes at the whole world.

**ANXIETY.** The person feels afraid without any specific or immediate threat.

**APATHY.** The person does not care about anything and does not want to do anything.

**DEPRESSION.** The depressed person feels hopeless and worthless.

**DRY MOUTH.** The mouth feels as if it is full of cotton.

**FATIGUE.** Feeling tired and wary is natural after long hours of hard work or combat.

**FORGETFULNESS.** This usually means a planned action is not taken.

**"FREEZING."** Freezing in this sense, means that some muscles cannot be made to move.

**FRUSTRATION.** Frustration results when something that is wanted or needed is denied.

**GUILT.** Feeling resulting from either not doing something required or wanting to do something wrong.

**IRRITABILITY.** The person feels annoyed by anything and everything.

**LONELINESS.** The person feels alone and isolated from others.

**NERVOUSNESS.** The person feels jumpy, tense, irritable, distracted.

**POUNDING HEART.** For no apparent reason, the heart beats heavily and fast.

**RATIONALIZATION.** This means blaming someone else for one's inability to achieve some goal or talking oneself out of the desired goal.

**TENSION.** Feelings of tension accompany waiting for something or wanting to do something--to act.

Table 5. Signs of Individual Stress

clothing, and an opportunity to sleep, yet within close proximity to the battle. The casualty is separated from the physically wounded casualties, he continues to wear his uniform, carry his weapon, and he is expected to maintain military discipline. Brief supportive psychotherapy may be initiated with focus upon objective data, such as the individual's unit, his military duty, and facts which led to his reaction. The casualty is encouraged to keep in contact with his unit, and when possible to have a friend, a buddy, or perhaps his commander visit and encourage his return to duty, thus eliminating any sense of stigma.

If the casualty fails to respond, he is evacuated to a medical clearing station or a 3E site, which is located in the rear. Here a mental health team will continue treatment for a period of 24 to 72 hours, and maintain a similar treatment procedure as at the previous location. However, the casualty is encouraged to participate in group psychotherapy, work details, and if unable to sleep adequately, a limited dose of medication is prescribed. At all times the casualty is made aware of his relationship to his unit, of unit esprit, and of his return to duty. However, if the casualty presents more severe psychiatric illness, further evacuation to a 4E site is initiated, and perhaps return to CONUS.

Experience from previous wars, and lessons learned from the Israelis, suggest that once casualties are evacuated beyond division or 4E level, few will return to their units, and many will develop chronic psychiatric problems. (18:21) Data from the Israeli experience indicates that casualties kept within close proximity to their unit, i.e., 3E or division, approximately 75 percent are returned to duty within 72 hours. (14:23) Their return to duty is most critical as psychiatric casualties represent recoverable manpower. A commander who does not accept the return of psychiatric casualties, or fully integrates them into his unit, loses a valuable asset.

#### CONCLUSION

The United States Armed Forces have advanced military technology from the trenches of World War I to the supersonic fighters of Vietnam and to manned space flight. Such an advance in half a century is astonishing, yet the advances made by combat psychiatry dull in comparison.

It is ironic that the principles of effective combat psychiatry were first established during World War I by



American medical personnel and essentially discarded following World War I. These same principles were to be re-established by the British and later by the Israelis, an even more ironic circumstance as American combat psychiatry is extensively modeled after the Israelis.

The historical basis for combat psychiatry is not as important as the fact that these principles have been proven and effectively conserve our military fighting strength. The three principles of immediacy, proximity, and expectancy have become the foundation of treatment and have set the course for further training and prevention. My intention in conducting this research was to demonstrate that combat effectiveness can be conserved by these established treatment prevention procedures. I believe this goal has been demonstrated; however, another task remains. This task centers on the development of treatment programs to counter the threat presented by the Soviet Union. Soviet military strategy is greatly influenced by their understanding of psychological stresses upon the combatant.

#### RECOMMENDATIONS

The advancement in high technology continues to push military weaponry to its zenith, yet the pace of combat psychiatry has fallen behind. The United States Air Force and its sister services must face this task and once again place greater emphasis on the development and visibility of combat psychiatry. Such an emphasis can be initiated by teaching combat psychiatry in professional military education. The education of our officer corps can be greatly advanced by incorporating combat psychiatry in service school curriculum. These commanders and future commanders have a need to know this phenomenon called combat stress. It is too late to first learn of combat stress when a commander is in the middle of a fire fight. Such knowledge is an essential part of leadership, and a must if a commander is to make accurate assessment of his unit's morale and will to fight. The commander must first know the signs of combat stress; therefore, instruction should begin with clear identification of combat stress and its symptoms. This phase may be enhanced by the analysis of combat stress as experienced by the Israelis and as experienced on American battlefields. Colonel Shabtai Noy of the Israeli Defense Force and Colonel Belenky from Walter Reed Army Hospital are two experts in this area, and each has exchanged views concerning combat stress research and advances made in treatment. (36:29-36)

Some of their conclusions have been incorporated in my research; however, our service schools could benefit from the firsthand experience of the Israelis and the extensive research conducted at Walter Reed Army Hospital.

The final phase of instruction consists of the hands-on training that exists at the base and brigade level. Our military services train the way they expect to fight the next war. We know the next war will bring to the battlefield advanced weaponry and enhanced lethality. We also know psychiatric casualties will rise in proportion to battle intensity and in proportion to the wounded and killed in action. Therefore, combat exercises must be realistic and simulate situations likely to produce combat stress.

A commander can be struck by a bullet and removed from his command. He may also be struck by excessive fatigue, stress, or severe loss of sleep and the results are the same--loss of effective command. The Israeli Defense Force has learned this lesson and built into their training a full range of combat stress scenarios. Their psychiatric teams work closely with the commanders not only as consultants but also as immediate treatment teams. These teams move out of their hospital offices and into the field; as a matter of fact all psychiatric team members have first been assigned to combat units to gain combat experience. Hands-on exercises allow the psychiatric team to experience the battlefield and the arena where fear of death and mutilation exist. Such training builds credibility between commanders and medical personnel. This training also builds self-confidence in the psychiatric team members, and consequently this confidence is transferred to psychiatric casualties.

A final recommendation, of paramount importance, is the training of mental health personnel in their war skills. Medical Red Flag is a ready-made exercise and a likely environment to conduct such training. In my opinion every mental health officer should be required to participate in Red Flag exercises. Each officer must have exposure to at least simulated combat. It is here soldiers and airmen witness the gut wrenching and emotional twisting experience of combat. If the medical officer cannot relate to this environment which inflicts physical and emotional wounds, his treatment may become diluted, his grasp of the mission may become unclear, and because of his incomplete training the casualty may experience chronic combat stress.

We can be certain the Soviets intend to minimize the effects of combat stress upon their forces and to maximize

the emotional shock upon US Forces from the forward edge of battle to the rear support areas. Their training focuses upon the psychological impact of battle, and they are constantly assessing US psychological weaknesses and fully intend to exploit such weakness.

The gauntlet has been thrown and the challenge is before us. We must not only establish a sound technological fighting force, but also a physically and emotionally fit force with the will to fight and survive.

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